ANNEX A TO REC 17-1R2

PARAMETERS REQUIRED FOR DETERMINATION OF COORDINATION DISTANCE FOR A TRANSMITTING EARTH STATION

Transmitting space radiocommunication service designation		Earth exploration-satellite, Meteorological satellite	
Frequency band (MHz)		401-403	
Receiving terrestrial service designations		Fixed, Mobile, Meteorological Aids	
Method			
Modulation at terrestrial station[1]		A	N
Terrestrial station interference parameters and criteria	p_0 (%)	0.01	0.01
	n	2	2
	p (%)	0.005	0.005
	N_L (dB)	0	0
	M_s (dB)	33	33
	W (dB)	0	0
Terrestrial station parameters	G_r (dB)	NA	NA
	ΔG (dB)	NA	NA
	T_r (K)	NA	NA
Reference bandwidth	B (Hz)	4×10^3	10^6
Threshold interference level	P_r (p) (dBW) in B	-131	-107

Notes to Annex A:

1 A: analogue modulation; N: digital modulation

ANNEX B TO REC 17-1R2

PARAMETERS REQUIRED FOR THE DETERMINATION OF COORDINATION DISTANCES FOR A RECEIVING STATION

Receiving space radiocommunication service designation			Meteoro-logical satellite	Meteoro-logical satellite Earth-Exploration Satellite	Meteoro-logical satellite (NGSO)	Meteoro-logical satellite (GSO)	Meteoro-logical satellite (GSO)	Meteoro-logical satellite (NGSO)	Earth exploration satellite	Earth exploration satellite
Frequency band (MHz)			400.15-401	460-470	1670-1710[1]	1670-1710[1]	7450-7550	7750-7850	8025-8400	25,500-27,000
Transmitting terrestrial service designations			Meteoro-logical Aids	Fixed, Mobile	Meteoro-logical Aids, Fixed, Mobile	Meteoro-logical Aids, Fixed, Mobile	Fixed, Mobile	Fixed, Mobile	Fixed, Mobile	Fixed, Mobile
Method										
Modulation at each station[2]			N	N	N	N	N	N	N	N
Earth station interference parameters and criteria	p_o (%)		0.012	0.012	0.006	0.011	0.002	0.001	0.011	0.25
	n		1	1	3	2	2	2	2	2
	p (%)		0.012	0.012	0.002	0.0055	0.001	0.0005	0.0055	0.125
	N_L (dB)		0		0	0	-	-	0	0
	M_s (dB)		4.3		2.8	0.9	-	-	4.7	11.4
	W (dB)		0		0	0	-	-	0	0
Terrestrial station parameters	E^3 (dBW) in B	A			50	50	55	55	55	
		N			37	37	42	42	42	
	P_r (dBW) in B	A			13	13	13	13	13	
		N			0	0	0	0	0	
	DG (dB)				-5	-5	0	0	0	
Reference bandwidth	B (Hz)		1775×10^2	85	10^6	4×10^3	10^7	10^7	10^6	10^7
Threshold interference level	P_r (p) (dBW) in B		-148	-178	-142	-177	-125	-125	-142	-120
Information Source			SA.1026-1		1-6/6 WP 7C	1-6/6 WP 7C	1-6/2 WP 7C F.758	1-6/6 WP 7C F.758	1-6/6 1-6/36 WP 7C	WP 7C

Notes to Annex B:

1 In the band 1670-1700 MHz an additional contour for coordination with the meteorological aids service is required as proposed by IA/17:
The coordination distance, d (km), for fixed earth stations in the meteorological-satellite service *vis-à-vis* stations in the meteorological aids service assumes a radiosonde altitude of 20 km and is determined as a function of the physical horizon elevation angle θ (degrees) for each azimuth, as follows:

$$d = 582 \left(\left(1 + (0.254\theta)^2\right)^{0.5} - 0.254\theta \right) \qquad \text{for } \theta > 0$$

$$d = 582 \qquad \text{for } \theta \leq 0$$

The minimum and maximum coordination distances are (100 – f(GHz)/2) km and 582 km, and occur at physical horizon angles greater than 11° and less than 0 °.

2 A: analogue modulation; N: digital modulation.

3 *E* is defined as the equivalent isotropically radiated power of the interfering terrestrial station in the reference bandwidth.

ANNEX C TO REC 17-1R2

PARAMETERS REQUIRED FOR THE DETERMINATION OF COORDINATION DISTANCE FOR A TRANSMITTING EARTH STATION IN BANDS SHARED BIDIRECTIONALLY WITH RECEIVING EARTH STATIONS

Service designation to space service in which the *transmitting* earth station operates		Mobile-satellite	Mobile-satellite	Fixed satellite
Frequency bands (MHz)		1675-1710	1675-1710	8025-8400
Service designation to space service in which the *receiving* earth station operates		Meteorological satellite	Meteorological satellite	Earth exploration satelltie
Orbit[1]		Non-GSO	GSO	Non-GSO
Modulation at receiving earth station[2]		N	N	N
Receiving earth station interference parameters and criteria	p_0 (%)	0.006	0.011	0.011
	n	3	2	2
	p (%)	0.002	0.0055	0.0055
	N_L (dB)	0	0	0
	M_s (dB)	2.8	0.9	4.7
	W (dB)	0	0	0
Receiving earth station parameters	G_r[3] (dB)	30	45	
	Pattern[4]	ITU-R REC. S.465-5	ITU-R REC.S.465-5	
	q_{min}[5]	5°	3°	
	T_r[6] (K)	370	118	
Reference bandwidth	B (Hz)	10^6	4×10^3	10^6
Threshold interference level	$P_r(p)$ (dBW) in B	-142	-177	-142
Information source		1-6/6 WP 7C	1-6/6 WP 7C	1-6/6, 1-6/36 WP 7C

Notes to Annex C:

1 Orbit of the space service in which the receiving earth station operates (non-GSO or GSO).
2 N: digital modulation.
3 On-axis gain of the receive earth station antenna.
4 Antenna radiation pattern for the receive earth station (e.g. Appendix 1 to Annex 1 of ITU-R Recommendation IS.847-1).
5 Minimum elevation angle of operation in degrees (non-GSO or GSO).
6 The thermal noise temperature of the receiving system at the terminal of the receiving antenna (under clear-sky conditions).